alu[dest, A_op, alu_op, B_op]

(ALU instruction)

Fig. 1A PRIOR ART

A_Op and B_Op are symbolic registers, the following are possible register class assignment pairs to A_Op and B_Op:

A_Op
General Purpose Register (GPR) (A Bank)
GPR (B Bank)
Transfer in (SRAM (S) or DRAM (D))
GPR (A Bank or B Bank)
Transfer in (SOP (B Bank)
GPR (A Bank or B Bank)
GPR (A Bank or B Bank)

(Possible register class assignment to A_Op and B_Op)

Fig. 1B

PRIOR ART